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07/506,059 04/09/90 NARAYANAN

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THOMPSON, W

NORTON COMPANY  
PATENT DEPARTMENT  
1 NEW BOND ST.  
BOX NUMBER 15008  
WORCESTER, MA 01615-0008

118

04/30/91

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                   |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.      | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____  |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-18 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-18 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

**EXAMINER'S ACTION**

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

The "person having ordinary skill" in this art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this case reasonably reflect this level of skill.

Claims 1-18 are rejected under 35 U.S.C. § 103 as being unpatentable over Markhoff-Matheny et al. considered with Hay et al.

The Matheny reference discloses a bonded sol gel sintered aluminous abrasive composition comprising sintered sol gel alumina particles and a vitreous (glass) bonding material encompassed by the instant claims, with the exception that friable filler particles are not disclosed. Note particularly Abstract, Col. 2, lines 30-48 and lines 52-55 and col. 4, lines

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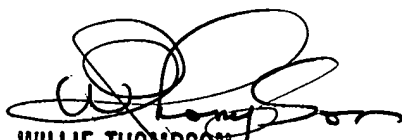
8-11, lines 16-21, lines 22-40, lines 47-49 and lines 58-62 of the reference.

The secondary reference discloses a very similiar composition to that of the primary reference with the exception <sup>by</sup> that the composition taught <sub>1</sub> the secondary reference utilizes friable fillers such as those instantly claimed. See col. 4, lines 64-68 bridged with col. 5, lines 1-4 of Hay et al.

Based on the above disclosures, it would be considered an obvious expedient under 35 USC 103 to incorporate the fillers suggested by Hay into the composition of Matheny for their known grinding aid properties.

The following are cited as of interest to show the state of art; Leitheiser et al ('827), Cottringer et al ('364), Narayanan et al ('743) and Haynes, Jr. ('685).

WThompson:dw  
(703) 308-0661  
April 29, 1991



**WILLIE THOMPSON**  
PATENT EXAMINER  
ART UNIT 118